

Claims

1, A plate-shaped pressed body with a thickness of less than about 700 μm , comprising an inorganic sorbent and a binder wherein the pressed body is obtainable by the process comprising the steps of

compressing a mixture comprised of the inorganic sorbent and the binder at a pressure of at least about 70 MPa, wherein the weight ratio of the sorbent to the binder in the mixture is between about 4:1 and 0.7:1 when measured on a dry weight basis and wherein the water content of the mixture determined at 160°C is between about 8 and 20 percent, and

calcining the resulting compressed mixture at a temperature of at least about 500°C to form the pressed body, wherein water contained in the calcined pressed body is less than about 2 percent.

2. The pressed body of Claim 1 wherein the mixture further comprises a compression aid.

3. The pressed body of Claim 2 wherein the compression aid comprises a fatty acid salt of a divalent or trivalent metal.

4. The pressed body of Claim 1 wherein the calcining is continued until the pressed body has a constant weight.

5. The pressed body of Claim 1 wherein the calcining is continued until the residual moisture content of the pressed body is less than about 1 percent by weight.

6. The pressed body of Claim 1 wherein the inorganic sorbent comprises a natural or synthetic zeolite.

7. The pressed body of Claim 1 wherein the binder comprises a smectite clay.

5 8. The pressed body of Claim 7 wherein the smectite clay comprises bentonite.

9. The pressed body of Claim 1 wherein the pressed body has a thickness from about 200 to about 400 μm .

10 10. The pressed body of Claim 1 wherein the ratio of the sorbent to the binder in the mixture on a dry weight basis is between 1.5 to 1 and 1 to 1.

11. The pressed body of Claim 1 wherein the mixture of sorbent and binder are compressed at a pressure from about 100 to about 1300 MPa.

12 12. The pressed body of Claim 1 wherein the mixture comprises particles, wherein not more than 15 percent of the particles are greater than about 250 μm in diameter.

13. The pressed body of Claim 1 wherein the mixture comprises particles, wherein not more than 8 percent of the particles are greater than about 200 μm in diameter.

14. The pressed body of Claim 1 wherein the mixture comprises particles, wherein not more than 8 percent of the particles are greater than about 150 μm in diameter.

15. The pressed body of Claim 1 wherein the mixture comprises particles, wherein at least about 50 percent of the

particles are greater than 45 μm in diameter.

16. The pressed body of Claim 1 wherein the mixture comprises particles, wherein at least about 60 percent of the particles are greater than 45 μm in diameter.

5 17. The pressed body of Claim 1 wherein the mixture comprises at least about 50 percent spherical particles.

18. The pressed body of Claim 1 wherein the mixture comprises at least about 80 percent spherical particles.

10 19. The pressed body of Claim 1 wherein the mixture comprises at least about 98 percent spherical particles.

20 20. The pressed body of Claim 1 wherein the mixture is spray dried prior to compressing.

25 21. The pressed body of Claim 1 wherein the compressed mixture is calcined under vacuum.

30 22. The pressed body of Claim 1 wherein the pressed body is calcined under pressure in a perforated tube.

35 23. A process for producing pressed bodies comprising mixing an inorganic sorbent and a binder to form a mixture and pressing said mixture at a pressure of at least about 70 MPa, wherein the weight ratio of the sorbent to the binder is between about 4:1 and about 0.7:1 and the water content of the mixture measured at 150° is between about 8 and 20 percent, and calcining the pressed bodies at temperatures of about 500°C until the water content is less than about 2 percent to form the pressed bodies.

24. A process for removing moisture from an electronic device by placing the pressed body of Claim 1 within the electronic device.

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